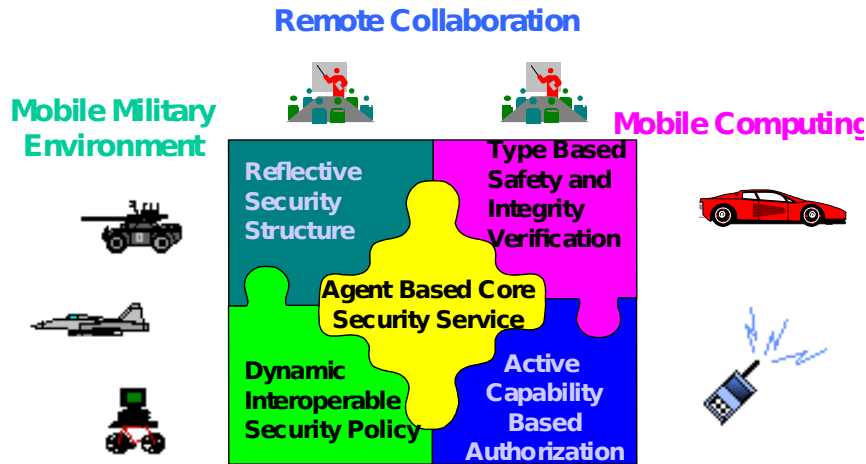


A Mobile Agent Based Security Architecture

Cherubim: An Agent Based Security Architecture

NEW IDEAS



- Agent-based dynamic mobile-effective security architecture
- Reflective software structure for run-time adaptation and customization
- Static and dynamic typing for active policy enforcement
- Interoperable security policy framework supporting run-time policy negotiation and formation
- Adaptable, multi-layered policies with temporal and spatial constraints
- Security extension to OMG IDL to separate security specification from main application function

IMPACT

- Agent-based architecture enables dynamic security enclaves required by mobile computing and collaboration
- Reflective security structure provide a flexible way of securely deploying counter attack security measures
- Active policy framework supports cross domain interoperability through dynamic policy negotiation and formation
- Hidden security features to enable easy and fast application development

SCHEDULE

12/97	03/98	8/98	3/99
Completion of implementation of core security provisions and detailed architectural design	Completion of development of OMG IDL security extension and active capability based authorization framework and interoperable security policy framework	Completion of prototyping of proposed secure agent based node architecture and preliminary performance evaluation and formal safety analysis	Demonstration of this prototyped architecture to mobile collaborative environments

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